

RESPONSE UNDER 37 C.F.R. § 1.116  
EXPEDITED PROCEDURE  
GROUP 2624  
**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q80075

Won-chul BANG, et al.

Appln. No.: 10/801,593

Group Art Unit: 2624

Confirmation No.: 1917

Examiner: Edward PARK

Filed: March 17, 2004

For: SPATIAL MOTION RECOGNITION SYSTEM AND METHOD USING A VIRTUAL  
HANDWRITING PLANE

**REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116**

**MAIL STOP AF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated December 5, 2007, please consider the remarks as submitted herewith on the accompanying pages.

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**REMARKS**

Claims 1-10 are all the claims pending in the application. Applicants thank the Examiner for indicating that claims 2, 3, 7 and 8 contain patentable subject matter.

Claims 1 and 6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Milner (4,862,152).

Claims 1, 4, 5, 6, 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Katagiri et al. (2003/0001818) in view of Sasaki et al. (5,499,306).

**Analysis**

Applicants respectfully request the Examiner to reconsider and withdraw the prior art rejections in view of the following comments and observations.

**Rejection of claims 1 and 6 based on Milner:**

In response to the arguments filed on September 26, 2007, the Examiner contends that Milner discloses a control unit for producing a virtual handwriting plane. The Examiner specifically relies on the receivers 120, 130, 140 as producing the virtual handwriting plane. More specifically, the Examiner states that the “three receivers produce a ‘virtual handwriting plane’ that is utilized to track and capture position data of the transmitter of figure 2, numeral 150.” (Final Office Action, at page 10.)

Thus, this so-called virtual handwriting plane of Milner is a fixed plane determined by the physical placement of the three receivers (e.g. placement on the computer screen in Fig. 2). It is not “based on three-dimensional track information *obtained through tracking*”.

Furthermore, as noted above, the Examiner indicates that the virtual handwriting plane is being *utilized to track and capture position data*. This is different from the present invention, in

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which the tracked information is utilized to determine the virtual handwriting plane (“producing a virtual handwriting plane...based on three-dimensional track information obtained through tracking”).

Thus, the alleged virtual handwriting plane in Milner is totally different from the virtual handwriting plane of the present invention. While the virtual handwriting plane in Milner is a fixed plane, the virtual handwriting plane in the claimed invention is based on the tracked position changes of the system body. With this feature, the present invention provides a more accurate spatial motion recognition system.

In view of the foregoing, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 1 and 6 based on Milner.

Rejection of claims 1, 4, 5, 6, 9 and 10 based on Katagiri and Sasaki:

In response to the arguments filed on September 26, 2007, the Examiner “interprets a virtual handwriting plane to be a projection of 3d positions onto a plane that is displayed on a monitor or display.” The Examiner continues on to state that placement of the virtual plane being relative to the respective positions is not recited in the claims.

The so-called virtual handwriting plane of Sasaki is a fixed plane based on the physical placement of the monitor or display. The plane receives projections of 3d positions, but *the 3d positions do not produce the plane*, since the plane is pre-existing on the monitor/display. The plane is not produced by being “based on three-dimensional track information *obtained through tracking*.”

Furthermore, while the Examiner correctly notes that the claims do not explicitly recite “placement of the virtual plane is relative to the respective positions”, the claims do recite “a

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control unit...for producing a virtual handwriting plane...based on three-dimensional track information obtained through tracking..." Thus, the production of the virtual plane is based on tracking of the three-dimensional motions of the system body in the present invention in order to obtain a more accurate spatial motion recognition system.

In view of the foregoing, the combination of Katagiri and Sasaki fails to render claims 1 and 6 obvious, as well as those claims dependent therefrom.

### **Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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